

Topics of Current Interest

The Medical Service and National Defence

Many of us give lip service to cooperation and repeatedly stress the necessity to regard each arm and service as a part of the whole military organization, requiring the effective cooperation of the remaining parts to enable each to function in an efficient manner. At the same time, we like to point out that the functioning of the military organization as a whole is dependent on the effective working of its component parts. Yet, in spite of the truth contained in these generalizations, many of us are inclined to limit our horizon to the "G" end of cooperation and are apt to neglect its essential application to the "Services".

It is dangerous to dogmatize regarding the respective importance either of the arms or of the services, but when we realize, irrespective of the degree to which mechanization may be adopted, that mere man remains the most valuable element within the military organization and that the primary function of the Medical Service in war is the conservation of manpower, we can see that a high degree of priority must be given to the war task of this service.

The successful accomplishment of that task requires consideration in three fields; the first pertains to the procurement of the necessary numbers of trained medical officers and assistants; the second calls for the military training of that personnel and their grouping into military units of such a type as will enable the service best to carry out its function in war; and the last deals with the tactical employment of those units in war.

The first factor, namely, the procurement of officer personnel, in so far as it affects Canada, is dealt with elsewhere in this number by Major E. S. Jeffrey, M.C., in his paper, "The Responsibility of the Canadian Medical Profession in National Defence".* The second and third factors, though not fully developed, are expressed by Major Jeffrey, when he stresses the necessity of military training for the civilian doctor and when he states that, "all the physicians and surgeons are of no use if we can not get the wounded to them and in decent shape."

The above extract gets down to the roots of one of the organizational problems facing the Medical Service; i.e., in view of the probable

extensive use of armoured fighting vehicles and aircraft in a major war of the future, and of the general increase in the mobility of the fighting arms, how are the wounded to be collected and brought to the medical officer?

The use of armoured fighting vehicles, particularly when used independently and not in cooperation with the other arms, presents a new problem in the collection and evacuation of casualties. The nearest approach to the problem is that of collecting casualties from a cavalry formation. This task is, at present, entrusted to a cavalry field ambulance which would mobilize on a basis of one per cavalry brigade. The unit is motorized and is highly mobile. It contains a headquarters, which is capable of forming a main dressing station, and four small but highly mobile sections. Each section consists of a light lorry to carry medical equipment and personnel, a medical officer in a light car and a motor cyclist for purposes of intercommunication. Each of these sections is capable of forming an advanced dressing station, where wounded are collected from regimental aid posts or points indicated by the regimental medical officer. There are twelve 6-wheeled motor ambulance cars with the headquarters of the unit for the purpose of clearing from A.D.S. to M.D.S.

Such a unit by virtue of its mobility is theoretically suitable for employment with formations endowed with greater mobility than that of a cavalry brigade, but from the practical viewpoint, such a unit does not solve entirely the question of the collection of casualties in an operation carried out by an armoured brigade. It is understood that present arrangements in Great Britain call for the inclusion of a motorized (Cavalry) Field Ambulance with an armoured brigade and that this medical unit will accompany the "B", or administrative echelon of that formation. Presumably the M.D.S. would open, in the first place, at the initial location of "B" echelon, and A.D.S.'s at the successive bounds or rallying points of the fighting portions of the brigade. Because, however, of the wide frontage and depth occupied by the fighting elements of the brigade, it is difficult to see how the wounded are to be collected and brought to the A.D.S. unless ambulance cars are provided for that purpose. It would seem doubtful if the present allowance of 12 cars, clearing to M.D.S., would permit of a sufficient number being available to work in advance of A.D.S.

We have only touched upon the fringe of the problem which increased fighting mobility has imposed on the Medical Service. The one conclusion that is generally accepted is that the mobility of medical units in the field must be increased. The motorization of the Cavalry Field Ambulance is the first gesture in this direction and it is likely to be followed by a

* *Canadian Defence Quarterly*, 1933, 11: 64. This article also appeared in the *Canad. M. Ass. J.*, 1933, 29: 195.

somewhat similar organization for the Field Ambulance and some measure of mobility given to that notoriously immobile unit, the Casualty Clearing Station.

This organizational problem is vital to the work of the Medical Service in war, because, irrespective of the professional standing of the medical personnel, their work can accomplish little unless backed up by an effective and smooth system for the collection, rapid evacuation and suitable accommodation of casualties. The successful attainment of this end can not be reached by the medical officer alone; it demands cooperation of the highest order between all parts of the military organization and particularly between the Staff and the Medical Service. On the part of the Staff it requires an understanding of medical problems and an appreciation of the influence which an effective medical organization can exert on the successful prosecution of a campaign. On the part of the Medical Service it demands, in addition to professional attainments, a wide and detailed knowledge not only of military organization and of the difficulties of movement and maintenance common to the army as a whole, but of the functions, the capabilities and the limitations of each of the arms and the other Services.

But this knowledge required by the medical officer, as so truthfully pointed out by Major Jeffrey, can only be attained in times of peace. Consequently, if through the agency of the "Section of Military Medicine," the civilian members of the Canadian Medical Association can acquire some measure of familiarity with general military questions and the medical problems arising from them, then a great step forward will have been accomplished.

The effect of such a progressive move should react favourably not only on the peace time activities of the Canadian Army Medical Corps but, of even greater importance, if the Canadian Medical Association accepts Major Jeffrey's resolution, together with its implication that the Association is responsible for meeting the demands of the Medical Service on mobilization, then the preliminary purpose of those who were responsible for the formation of the military section will have been attained. The ultimate success of the affiliation depends, however, upon the creation and the maintenance of the interest of the parent body in the activities and the problems of its youngest off-spring. To generate and foster that interest would now seem to be the chief task of the "Section of Military Medicine."

Just as in war the Medical Service must look to the Staff for assistance, so in this important peace time task it would be justified, and, we trust not disappointed, in looking for cooperation from the same quarter.—Editorial, *Canadian Defence Quarterly*, 1933, 11: 5.

Abstracts from Current Literature

Medicine

Pernicious Anæmia without Achlorhydria.

Harvey, E. A. and Murphy, W. P., *Ann. Int. Med.*, 1933, 6: 1393.

Achlorhydria is usually considered to be a permanent condition in pernicious anæmia, even after a good remission has been brought about by liver treatment. The occasional case has been reported, however, in which free hydrochloric acid returned to the stomach after a remission. Several observers have reported the occasional case of a disease condition typical of pernicious anæmia in all essential respects, except that free hydrochloric acid was present in the gastric secretion. The authors report such a case, giving the laboratory and clinical findings in considerable detail. The blood responded quickly and in a typical manner to the oral administration of liver, and later to the intramuscular injection of liver extract, when, on account of diarrhoea and the poor absorption of liver and liver extract given by mouth, a relapse had occurred. The patient suffered from chronic cholecystitis and cholelithiasis, and had a diffuse perihepatitis, as noted at operation. These seemed to have a retarding influence on the efficacy of the liver therapy. When the patient came to autopsy, the findings were typical of pernicious anæmia.

The authors state that in view of the inconsistency of the achlorhydria, disturbances in the biliary system or the liver may sometimes be of even more immediate etiological importance than the gastric changes.

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Migraine. Some considerations of Allergy as a Factor in Familial Recurrent Headache.

Rinkel, H. J., *J. of Allergy*, 1933, 4: 303.

In this paper the term "migraine" is used to mean (1) attacks of headache with cortical features, *i.e.*, scintillating scotomata, homologous hemianopsia, motor aphasia, and paræsthesias; and (2) recurrent paroxysmal headaches familial in nature and for which no organic cause can be found. Analysis of the history and symptomatology of a series of cases of migraine (number not stated) did not reveal any definite findings by which a diagnosis of migraine due to allergy could be established. This could only be done by clinical trial, but was thought most probable in those patients with early onset, frequent irregular attacks, and a family history of headaches. The author notes that the precipitation of migraine by the ingestion of certain foods does not prove allergy to be the mechanism of symptom production in these cases. But the